Intellectual Property Rights and the Internet in Central Asia

by Asomudin Atoev[1]

Today Tajikistan, as a country in transition, faces a technological challenge in the form of a digital divide that is obviously slowing down the transition process. The growth of this divide is a serious impediment for Tajikistani society to benefit from new information and communication technologies (ICT). It has recently become a focus of concern for the Tajikistani government and community. During the past few years, important legal documents related to ICT have been adopted and many ICT-driven projects have been developed and funding has been raised. For example, there some computerization programs within the local academic community and the public sector have been or are in the process of being completed.

Many ICT-driven projects seem to focus on the improvement of computer hardware infrastructure of these communities. Little or sometimes even no attention is given to the software applications that will be used by the 'target groups' and the importance of building IT into the education and training curriculum. Furthermore, some projects assume utilization of pirated proprietary software by default leading the country into a technological lock-in situation, with ensuing dependency on proprietary software companies.

At the same time, the successful implementation of hardware ICT projects will enhance the growth of the computer literate population. Yet, considering that the cost of a basic proprietary toolset (Windows XP) is equivalent to 40 months of average income in Tajikistan, there is a high probability that a principal number of customers will use pirated proprietary software, and thereby increase the software piracy rate for the country. As with all other countries of the region, Tajikistan has been waiting for acceptance into the WTO for several years. One of the major impediments to this process is continuing violation of intellectual property rights laws and the growth of software piracy does little to improve the situation.

Even if the state budget covers the expenses for acquiring proprietary software licenses at a discount for educational establishments there is no guarantee that there will be funding for software and subsequent hardware upgrade. Students in both secondary and universities constitute over 20% of the Tajikistani population and their skills are mainly oriented around proprietary software, which they unable to buy. In this scenario, current violations of intellectual property laws are bound to deteriorate and even if this does not happen, the country would still be led into a lock-in situation. As a result, most efforts cannot reach the goal of narrowing the existing digital divide.

Current IT training curriculum for schools is based on Microsoft applications and this has a knock influence on the curriculum of universities. The educated experts will promote the diffusion of new legal technologies in all fields of industry in the country. However, when pirated proprietary software is in the core of the training module it will be easily transported to all other sectors of society and economy.

The majority of ICT-driven projects funded by the international financial institutions have been implemented for local and regional academic communities. The ultimate goal of all those projects is the same –self-sustainability in order to meet the needs of the community for as long as is possible. As argued above, this goal is hard to accomplish if projects are based on proprietary software, and which upgrade and purchase of new versions require huge additional fundings. It may look like the "treatment" is worse than the "disease".

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Intellectual property is one of the main goods of a knowledge-based society. Developing nations or nations in transition cannot fully benefit from information society if they remain passive consumers of ICT. In order to be equal members they have to be developers and they have to create too. The everlasting consumer position maintains dependency on certain proprietary software companies. This dependency cannot allow nations to grow into a developer of new technologies and, as a consequence, get rid of software piracy.

These statements are particularly true for nations as small as Tajikistan. Because a small nation cannot be interesting market for a proprietary software company, the nation's demands for say, localization of computer applications cannot be seriously considered. At the same time, a small nation is incapable of doing this itself, nor can it afford for a foreign company to do it for the nation. Furthermore, considering that the losses suffered from software piracy by the proprietary companies are not significant, if a company is indifferent to the rise of software piracy rates in a small country, the following question may arise. Would not the distribution of affordable but pirated copies of software contribute to the development of a potential market of the proprietary software companies?

The public sector has undertaken measures to make use of the benefits of the new technologies. ICT driven projects have been implemented in governmental ministries and agencies and in the parliamentarian committees. According to the government regulations and presidential decrees the state data transfer network will be established to link all central state institutions to local governments. But all these efforts have been based on proprietary software, the major part of which has been pirated with all the attendant risks of bringing the sector into a lock-in situation.

The business sector is also making its "contribution" to promoting a lock-in situation in Tajikistan. Vendors of computer equipment have been faced many relatively high import taxes (over 25% of the original cost). They are quite happy to avoid one more item, that is, the software license fee that increases the overall cost for consumers, by using pirated software. Even if they supply a license for the software installed it is most likely a copy from many delivered PCs.

This fuller policy research paper considers the Free and Open Source Software (FOSS) as an optimal tool to overcome the problem of growing software piracy in the Central Asian region, particularly in Tajikistan.[2] It does not claim that this is the only option to meet this problem. Another possible option might be utilization of licensed proprietary software. For example, a proprietary software company such as Microsoft might be willing to offer free or discounted licenses for educational establishments[3] in order to reduce software piracy rate. If we consider that the academic community is the most computerized in Tajikistan (a situation is similar in other countries of the region) this step will have a significant impacts on the problem. At the same time, this temporary measure might well be used to lock the biggest IT using community of the country into a Microsoft dependency situation. Later on, it might boost the piracy rate when it comes time to purchase new licenses for updating.

There does exist a principal difference between these two approaches. Unlike proprietary software-driven solution FOSS does offer solutions to the problem of lock in dependencies without losing access to the technologies. And access to technologies does not mean only using them but also being able to modify technologies and creating new technologies, something that is not possible with a proprietary software approach.

In addition the GNU GPL license is a powerful legal document too, because it does not infringe local legislation. It is based on common human values and does not create any "forbidden fruit" that looks so delightful to be "stolen" (pirated). Free and Open Software constantly developed by the FOSS global community is software that allows anyone in the world to be its developer. It addresses the fundamental nature of software in general which is to be released and never finished. Anyone who wants to develop his or her programming skills can receive his or her very own training centre. That is why it is an inexpensive tool to develop skills for both programming and applications usage. In addition it develops a culture of respect to rules of law, particularly intellectual property issues, values that any society needs and appreciates.

Countries of the region have good opportunities to make use of FOSS not only as a method against software piracy but also as enabler of development, particularly for the academic community, civil society and public

[2] This can be found at http://www.policy.hu/atoev/research.html

[3] Microsoft IT Academy Program, http://www.microsoft.com/Education/MSITAcademy/WorldWide/Default.aspx

sector. Each country in the region has its own language that in conjunction with small number of population cannot be interesting for proprietary software companies to localize their products. Moreover the majority ofutilized software in the region are Russian localized versions. But this option cannot solve the problem for the simple fact that the young generation does not speak Russian well.utilized software in the region are Russian localized versions. But this option cannot solve the problem for the simple fact that the young generation does not speak Russian well.

The policy paper aims to turn this problem into an issue and influence through two approaches – education-oriented and economy/trade – oriented. For both these approaches the target group is the related governmental institutions (Ministry of Education, Ministry of Economy and Trade, Parliament), the academic community, and civil society representatives. National academic communities are the most active partners in the region. Supported by international foundations National Research and Educational Networks (NREN) were established to unite local research institutions and universities. A number of local and regional ICT related projects have been implemented successfully. The biggest project is the Virtual Silk Highway that established a virtual regional academic community. Potentially this community is powerful enough to meet regional challenges and software piracy is one such issue.

Unlike proprietary software, localization of FOSS (so far Linux Mandrake) is supported by groups of enthusiasts worldwide and has been started for 3 out of 5 region's countries. This initiative has a good chance to promote computer literacy in the nations native languages, particularly in the rural areas, where the majority of population lives.

Countries of the region face common economic problems. They all are either members of or in the process of accession to the WTO. Only the Kyrgyz Republic is actually a member of the World Trade Organization. The four other countries are in the WTO Special Watch List. One of the major reasons why they are not accepted to this organization is continuing infringement of intellectual property rights

The Ministry of Education, the local NRENs, and the leadership of universities will be the principal focus to raise their awareness of the potential of FOSS. It will also require working jointly with the local FOSS community to develop a national program for FOSS utilization in the education system of Tajikistan. Tajikistan cannot be an equal member of the international community if its economy remains so import-oriented as it is now. It is necessary to develop country's export potential. This statement seems too ambitious for a country like Tajikistan unless we consider the rapidly growing potential of ICT, which offer unprecedented tools for social and economical development of the nations leading to the information society. The power of these tools is that a strong economy is not a prerequisite for smaller nations to utilize ICT potential for meeting local challenges. The bright example of such a statement could be the experience of Estonia, India and Malaysia, all of which are exporters in the ICT global market. An efficient information policy of the government can play a vital role here.

To develop an efficient policy and adopt a realistic action plan an Estonian formula of success is needed. It has three elements, namely, political will, expertise and financing. Is it possible to implement this formula in countries like Tajikistan? The State Strategy on ICT for Development (E-strategy) should consider how to overcome the existing digital divide with FOSS. If utilization of FOSS promotes a reduction of software piracy than it can be the right tool for both overcoming digital divide and reducing software piracy. In addition, the E-strategy highlights the importance of local intellectual property rights legislation to be harmonized with international treaties and to develop clear custom procedures for import and export of operating systems and other software applications.

If the E-strategy expresses the political will of Tajikistan its efficient implementation can rely on FOSS as a powerful tool in combating the digital divide. Experience shows that FOSS can not only promote inexpensive skills development it can help reduce software piracy without losing access to the benefits of ICT.